

REMARKS/ARGUMENTS

Claims 1-11 remain in this application. Claims 1 and 6 have been amended.

Claims 1 and 6 have been amended for the following reasons:

5 1. Does the glue surround the metal sheets?

 In Huang's patent, the glue of epoxy mold compound 122, which is mentioned in the office action, seals the leads (metal sheets) 304 but does not surround the leads 304. In this application, however, the glue 18 does surrounds the metal sheets 16. Therefore, the structure of Huang's patent is different from
10 that of this application. Since the feature of this application has been clearly shown in the drawing, no new matter is added.

 2. Is the projecting edge arranged on the glue?

 In Huang's patent, the projecting edge 124 is arranged on the leads (metal
15 sheets) 304. However, the projecting edge 30 of this application is arranged on the glue. Since the feature of this application has been clearly shown in the drawing, no new matter is added.

 3. Is the image sensing chip mounted on the glue?

20 In Huang's patent, the image sensing chip 130 is mounted on the die pad 302 but not on the glue of epoxy mold compound 122. However, the image sensing chip 12 is mounted on the glue 18 of the substrate 10, as shown in FIG. 1. Since the feature of this application has been clearly shown in the drawing, no new matter is added. It should be noted that in Lin's patent, the die (image sensing chip)
25 15 is also mounted to a die pad 13 but not the protective body (glue) 22.

 As for Lin's patent, the tape 12 is removed to form an image sensor but not to form a substrate. So, Lin's patent does not motivate the application to form a substrate as additionally mentioned in Claim 7 of this application.

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 Attached hereto is a marked-up version of the changes made to the claims

by the current amendments. The attached page is captioned "Version with markings to show changes made."

In light of the above amendments and remarks, Applicant now asserts that all of the grounds for rejection have been traversed or overcome by amendments, and
5 that all of the present claims are in condition for immediate allowance. Applicant therefore requests reconsideration of the objections and rejections, and solicits allowance of the present claims at an early date.

Thank you for your consideration.

Respectfully submitted,

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Date: Jan 9, 2003 Burton Yang

Burton Yang

Title of Officer: Manager of Kingpak Technology Inc.,
the Assignee of this application

15 Address: No. 84, Taiho Road, Chupei, Hsinchu Hsien, Taiwan



VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

Claim 1 has been amended as follows:

- 5 1. (Thrice Amended) A packaging structure of an image sensor, comprising:

 a substrate including a plurality of straight metal sheets directly penetrating
 through the substrate, glue for sealing the metal sheets after the metal sheets are
 formed, a first surface having a periphery, and a second surface opposite to the
 first surface, the metal sheets being exposed to the outside via the first surface and
10 the second surface to form first contacts and second contacts, respectively,
 wherein the glue surrounds the plurality of straight metal sheets;

 a projecting edge provided on the periphery of the first surface of the
 substrate to form a concavity above the substrate, the projecting edge being
 arranged on the glue;

- 15 an image sensing chip mounted on the glue of the substrate and within the
 concavity, a plurality of bonding pads being formed on the image sensing chip;

 a plurality of wirings electrically and directly connecting the bonding pads
 of the image sensing chip to the first contacts of the first surface of the substrate in
 order to electrically connect the image sensing chip to the substrate, so that
20 electrical signals from the image sensing chip are capable of being transmitted to
 the second contacts of the second surface of the substrate; and

 a transparent layer arranged on the projecting edge on the first surface of the
 substrate so that the image sensing chip is capable of receiving optical signals.

- 25 Claim 6 has been amended as follows:

 6. (Thrice Amended) A method for packing an image sensor, comprising the
 steps of:

preparing a substrate including a plurality of straight metal sheets directly penetrating through the substrate, glue for sealing the metal sheets after the metal sheets are formed, a first surface having a periphery, and a second surface opposite to the first surface, the metal sheets being exposed to the outside via the
5 first surface and the second surface to form first contacts and second contacts, respectively, wherein the glue surrounds the plurality of straight metal sheets;

providing a projecting edge on the periphery of the first surface of the substrate to form a concavity above the substrate, the projecting edge being arranged on the glue;

10 mounting an image sensing chip having a plurality of bonding pads onto the first surface and the glue of the substrate and within the concavity;

directly connecting the bonding pads of the image sensing chip to the first contacts of the first surface of the substrate by a plurality of wirings; and

mounting a transparent layer on the projecting edge located on the first
15 surface of the substrate in order to cover the image sensing chip.